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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,772	10/14/2003	Chiang Yeh	134116	5155

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EXAMINER	
CHANG, JUNGWON	

ART UNIT	PAPER NUMBER
2454	

MAIL DATE	DELIVERY MODE
01/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/684,772	YEH ET AL.
	Examiner	**Art Unit**
	JUNGWON CHANG	2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2008*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.
  4a) Of the above claim(s) *24 and 25* is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-23* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's election of claims 1-23 filed on 10/24/08. Claims 1-23 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varma et al, (US 5,859,835), hereinafter Varma, in view of Dulin et al, (US 2002/0055356), hereinafter Dulin, Lahat et al, (US 6,643,612), hereinafter Lahat.

4. As to claims 1 and 18, Varma discloses the invention as claimed, including a bandwidth provisioning method comprising the steps of:

(a) appending an inter-switching device label comprising a timestamp to a protocol data unit (PDU) segment at a first switching device (fig. 23; col. 9, line 64 – col. 10, line 13, "time-stamp"; col. 24, lines 40-61), the first switching device comprising a plurality of queues characterized by one or more quality of service (QoS) properties (col. 1, lines 37-65; col. 10, line 13 – col. 11, line 6, “increasing the system potential by a transmission time...minimum bandwidth”);

(b) buffering the PDU segment in one of the plurality of queues (figs. 3-4; col. 12, lines 33-50);

(c) conveying the PDU segment to a second switching device (fig. 1; col. 11, lines 13-29; col. 13, lines 13-24);

5. Although Varma discloses determining delay time using the timestamp, Varma does not specifically disclose determining, using the timestamp, an observed delay for the PDU segment to propagate between the first switching device and the second switching device. Lahat discloses determining, using the timestamp, an observed delay for the PDU segment to propagate between the first switching device and the second switching device (fig. 6; col. 12, lines 6-63, "delay calculation"). It would have been obvious one of ordinary skill in the art at the time of the invention was made to combine the teaching of Varma and Lahat because Lahat's teaching would improve the system performance by obtaining the information of end to end delay calculations, as taught by Lahat, col. 2, lines 16-23.

6. Varma does not specifically disclose altering at least one of the one or more QoS properties from the second switching device depending on the observed delay. However, Dulin discloses altering at least one of the one or more QoS properties from the second switching device depending on the observed delay (page 7, 0103; page 9, 0158). It would have been obvious one of ordinary skill in the art at the time of the invention was made to combine the teaching of Varma and Dulin because Dulin's

teaching would compensate the propagation delay by adjusting the transmit timing, as taught by Dulin.

7. As to claim 2, Varma discloses wherein the plurality of queues comprise a plurality of ingress queues, the ingress characterized by QoS properties, the QoS properties comprising one or more queuing properties (fig. 1; col. 1, lines 37-65; col. 10, line 13 – col. 11, line 6).

8. As to claim 3, Varma discloses wherein one of the queuing properties is the size of the PDU segment (col. 8, lines 38-45).

9. As to claims 4, 8 and 19, they are rejected for the same reasons set forth in claims 1 and 18 above.

10. As to claims 5 and 20, Varma discloses, wherein the method filrther comprises the steps of:

(a) removing the QoS label at tile second switching device; and

(b) reassembling, at the second switching device, the plurality of PDU fragments into at least one original PDU ("decoded using a simple binary encoder"; col. 24, lines 20-61).

11. As to claim 6-7 and 21-23, Varma discloses defining a maximum fragmentation size into which the at least one PDU is fragmented (col. 20, lines 29-53).

12. As to claims 9-10, Varma discloses, wherein the one or more QoS properties comprise a fragmentation property defining whether to fragment one or more PDUs of one or more traffic flows (col. 20, lines 29-53).

13. As to claim 11, Varma discloses wherein the one or more queuing properties comprise a fragmentation property defining whether to fragment a PDU after transmission from the associated queue to a switch fabric has begun but before transmission is completed (figs. 3-4; col. 12, lines 33-50).

14. As to claim 12, Varma discloses wherein the PDU segment is a protocol data unit (col. 8, lines 38-45).

15. As to claim 13, Varma discloses the wherein the PDU segment is a PDU fragment (col. 8, lines 38-45).

16. As to claim 14, Varma discloses wherein the inter-switching device label further comprises a fragment identifier (fig. 23).

17. As to claim 15, Varma discloses wherein the inter-switching device label further comprises an operation code comprising one or more instructions to the second switching device for processing the PDU fragment (fig. 23).

18. As to claims 16 and 17, they are rejected for the same reasons set forth in claims 1 and 18 above.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ta et al, US 2003/0076784, Stine, US 2003/0033394, Yik et al, US 7,257,134, Chiussi et al, US 7,027,457, Drysdale et al, US 6,058,102, Xu et al, US 2004/0213155, disclose method and apparatus for performing service level analysis of communications network performance metrics.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNGWON CHANG whose telephone number is (571)272-3960. The examiner can normally be reached on M-F 6:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/
Primary Examiner, Art Unit 2454
January 5, 2008